

LSI DOCKET NO. 01-645

ABSTRACT OF THE DISCLOSURE

POWER MONITORING AND REDUCTION FOR EMBEDDED IO PROCESSORS

5 A mechanism is provided for controlling the heat output of a controller by monitoring the temperature of the controller using an embedded heat sensor. The IO processor monitors the temperature and controls the rate of the IO flow to control the temperature. The IO processor accomplishes this by checking the current temperature every time it gets a timer interrupt. If the temperature becomes too high, the IO processor may slow down the processor speeds in the
10 controller. The IO processor may also slow down the throughput by inserting a delay between each IO request processed. Furthermore, the IO processor may slow down the rate at which data is passed onto the bus. Still further, the IO processor may insert a delay between batches of IO requests. By slowing down the IO flow, the IO processor decreases the overall power consumption and, thus, controls the heat output.